REMARKS

The undersigned attorney spoke with the Examiner, via telephone, on April 28, 2004 about independent claims of this application (sent in draft form to the Examiner on April 23, 2004, by facsimile). Pursuant to the telephone conference, non-method independent claims are now amended to include structural limitations of the Howard Cascade configuration.

Claims 21, 23-26 and 33-57 are pending in the Applicant's instant application. Claims 1-20, 22 and 27-32 are cancelled, and claims 21 and 23-26 are amended. Claims 33-56 are newly added with this amendment. The specification is amended in accordance with the Examiner's requirement for removal of "means" language, and additionally to claim priority to provisional applications. No new matter is added to the specification or the claims with the amendments presented herein, nor do new claims 33-56 introduce new matter.

In the Office Action of November 28, 2003, the Examiner rejected claims 1-27 and withdrew claims 28-32 from consideration. The Examiner further noted that the listing of references in pages 2-3 of the specification constituted an improper information disclosure statement; and objected to the drawings under 37 CFR § 1.83(a). These concerns were again presented in the supplemental Office Action of December 17, 2003.

Applicants believe that the present Amendment and Response addresses each of the Examiner's rejections and objections, as discussed herein below, in paragraphs numbered according to points raised in the supplemental Office Action of December 17, 2003.

2. Election/Restrictions

Applicants note the Examiner's withdrawal from consideration of claims 28-32. In response to the Examiner's requirement for cancellation of nonelected claims 28-32, Applicants would like to point out that claims 28-32 were previously cancelled in the Response to Restriction Requirement filed 08 October 2003.

3. Information Disclosure Statement

In the Office Action of November 28, 2003, the Examiner states that the listing of references in pages 2-3 of the specification constitutes an improper information disclosure statement. Regarding said references, the specification states: "The following patents and articles provide useful *background* of the invention," (page 2, line 25, emphasis added). The listing of said references is not intended to serve as an Information Disclosure Statement. However, Applicants submit herewith an Information Disclosure Statement citing several of said references, along with authorization to charge the required fee of \$180 to Deposit Account 12-0600 and copies of all cited references, for consideration by the Office.

4. DRAWINGS

The drawings stand objected to under 37 C.F.R. § 1.83(a), the Examiner stating that "the features of claims 1 and 21; the cluster of users processing distribute functions among cluster; the software facilitation payment, in claims 27, 3, 13-17 must be shown in the drawings or the feature(s) canceled from the claims." Applicants respectfully disagree.

The "cluster of users processing distribute functions among cluster" does not appear in former claim 1 or amended claim 21. The closest approximation to the Examiner's wording appears in claim 26 as originally filed, which recited an ISP comprising: a plurality of users connected in cluster to distribute processing functions among the cluster. Applicants thus assume that the Examiner meant to reference claim 26. Even though originally filed claim 26 was supported by the specification, for example, in lines 1-11 of page 4 and in Figs. 6 and 6A, claim 26 is amended to remove reference to the plurality of users connected in cluster to distribute processing functions among the cluster.

Amended claim 21 recites "a distributed cluster of nodes connected to the computer through the network". The distributed cluster of nodes is exemplified in cluster 26 of Fig. 1 and cluster 84 of Fig. 4B. As supported by the specification, "A cluster of the invention includes an array of computers (i.e., "nodes") coupled together in a parallel processing fashion." See page 10, lines 18-20. Claims 1-20 and 27-32 have been cancelled.

The amendments to the claims thus eliminate the features objected to by the Examiner. Applicants therefore request withdrawal of the objections to the drawings.

5-12. Claim Rejections – 35 U.S.C. § 112

The specification stands objected to under 35 U.S.C. §112, first paragraph, as failing to adequately teach how to make and/or use the invention, "i.e. cluster of user, user-performing function." Applicants is unsure of what the Examiner means by this. If the Examiner means to say that the claim language is not supported by the specification, Applicants respectfully disagree and traverse the rejection. The Examiner will note that amended claims 21-26 and new claims 33-56 do not recite a cluster of users or users performing functions.

Claim 26 stands rejected for the reasons cited in the objection to the specification. Applicants respectfully disagree and traverse the rejection. As stated, amended claim 26 does not recite the objectionable terms cited above; therefore, Applicants request withdrawal of the rejection under 35 U.S.C. § 112.

The Examiner further objected to the disclosure, requiring the removal of all means language from all parts of the application except the claims portion, and stating that means language tends to impede understanding of the described structure. The specification is thus amended to replace incidences of "mean" and "means" with appropriate synonyms.

The Examiner next rejected claims 1, 5, 6, 9, and 18 under 35 U.S.C. §112. These claims have been cancelled.

Claims 21-24 and 26 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 21-24 and 26 further stand rejected under 35 U.S.C. §112 for being incomplete for omitting essential functions, such omission amounting to a gap between the elements. Applicants believe that the amendments to claims 21, 23, 24 and 26 serve (a) to point out and distinctly claim the invention, and (b) to present essential functions, thus bridging gaps between claim elements. Claim 22 has been cancelled. Withdrawal of the Examiner's rejection and allowance of claims 21, 23, 24 and 26 is therefore requested.

13-36. Claim Rejections - 35 USC §§ 102 and 103

Claims 1, 2, and 4-27 stand rejected under various sections of 35 U.S.C. §102 and/or 35 U.S.C. §103. Amended claims 21 and 23-26 and new claims 33-56 are not shown or taught by U.S. Patent No. 6,167,428 ("Ellis"), U.S. Patent No. 5,860,010 ("Attal") or U.S. Patent No. 5,905,736 ("Ronen"), or by any combination thereof.

For example, none of the cited art teach or suggest amended claim 21, including all of the elements of:

- a computer connected to a network;
- a distributed cluster of nodes connected to the computer through the network;
- a library, associated with each node, accepting requests to accelerate processing of the algorithms; and
- a controller having protocol software to engage the nodes to process the
 algorithms and return a result to the computer, the controller and nodes
 having a priori knowledge of logical connections between the nodes to
 accelerate parallel processing of data therebetween, the controller and
 cluster being arranged as a Howard Cascade.

The prior art also fails to teach or suggest all elements of new independent claims 33 and 51. Applicants therefore respectfully request withdrawal of the Examiner's rejections, examination of new claims 33-56, and allowance of all of pending claims 21, 22-26 and 33-56.

CONCLUSION

In view of the above Amendments and Remarks, Applicants have addressed all issues raised in the Office Action dated November 28, 2003 and the Supplemental Office Action dated December 17, 2003, and respectfully solicit a Notice of Allowance for claims 21, 22-26 and 33-56. Should any issues remain, the Examiner is encouraged to telephone the undersigned attorney.

Applicants submit herewith a Petition for a 2-month extension of time, along with authorization to charge the required fee of \$210 for a small entity to Deposit Account 12-0600. Based upon the December 17, 2003 mailing date of the Supplemental Office Action, the period for reply is thus extended, up to and including May 17, 2004. Applicants further submit authorization to charge the \$180 fee for submission of an Information Disclosure Statement under 37 C.F.R. 1.98(c) to Deposit Account 12-0600.

In light of the cancellation of claims 1-20, 22 and 27-32, no fees are believed due for the addition of new claims 33-56. However, also due to the cancellation of claims 1-20, 22 and 27-32, along with the claim amendments submitted herein, Applicants submit herewith a Request to Correct Inventorship pursuant 37 C.F.R. § 1.48(b), along with authorization to charge the required fee of \$130 under 37 C.F.R. § 1.17(i). Applicants believe no other fees are due; however, should any additional fee be deemed necessary in connection with this Response, the commissioner is hereby authorized to charge the aforementioned Deposit Account.

We appreciate the telephone conference of April 28, 2004. As discussed, the inventors and the undersigned attorney would like to visit with the Examiner, in an in-person interview and on a mutually-agreeable date, to discuss the inventions disclosed within this application.

Respectfully submitted,

By:

Curtis A. Vock, Reg. No. 38,356 LATHROP & GAGE L.C.

4845 Pearl East Circle, Suite 300

Boulder, CO 80301

Telephone: (720) 931-3011 Facsimile: (720) 931-3001